

~~THIS Reference ON~~  
~~ATTACHED CD~~

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
22 August 2002 (22.08.2002)

PCT

(10) International Publication Number  
WO 02/064611 A1

(51) International Patent Classification<sup>7</sup>: C07H 21/02,  
21/04

San Francisco, CA 94081 (US). SUN, Yongming [US/US];  
869 S. Winchester Boulevard, Apartment 260, San Jose,  
CA 95128 (US). LIU, Chenghua [CN/US]; 1125 Ranchero  
Way #14, San Jose, CA 95117 (US).

(21) International Application Number: PCT/US02/04197

(74) Agents: LICATA, Jane, Massey et al.; Licata & Tyrrell  
P.C., 66 E. Main Street, Marlton, NJ 08053 (US).

(22) International Filing Date: 12 February 2002 (12.02.2002)

(81) Designated States (national): AE, AG, AL, AM, AT, AU,

(25) Filing Language: English

AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

(26) Publication Language: English

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

(30) Priority Data:  
60/268,292 13 February 2001 (13.02.2001) US

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

(63) Related by continuation (CON) or continuation-in-part  
(CIP) to earlier application:

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,

US 60/268,292 (CIP)  
Filed on 13 February 2001 (13.02.2001)

MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,

(71) Applicant (for all designated States except US): DI-  
ADEXUS, INC. [US/US]; 343 Oyster Point Boulevard,  
South San Francisco, CA 94080 (US).

SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,

VN, YU, ZA, ZM, ZW.

(72) Inventors; and

(84) Designated States (regional): ARIPO patent (GH, GM,

(75) Inventors/Applicants (for US only): SALCEDA, Susana  
[AR/US]; 4118 Crescendo Avenue, San Jose, CA 95136  
(US). MACINA, Roberto, A. [AR/US]; 4118 Crescendo  
Avenue, San Jose, CA 95136 (US). HU, Ping [US/US]; 108  
Palmer Street, San Ramon, CA 94583 (US). RECIPON,  
Herve [FR/US]; 85 Fortuna Avenue, San Francisco, CA  
94115 (US). KARRA, Kalpana [IN/US]; 6511 Rainbow  
Drive, San Jose, CA 95129 (US). CAFFERKEY, Robert  
[IE/US]; 849 West Orange Avenue, Apartment 1030, South

KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,

GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent

(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A1

(54) Title: COMPOSITIONS AND METHODS RELATING TO BREAST SPECIFIC GENES AND PROTEINS

(57) Abstract: The present invention relates to newly identified nucleic acids and polypeptides present in normal and neoplastic breast cells, including fragments, variants and derivatives of the nucleic acids and polypeptides. The present invention also relates to antibodies to the polypeptides of the invention, as well as agonists and antagonists of the polypeptides of the invention. The invention also relates to compositions comprising the nucleic acids, polypeptides, antibodies, variants, derivatives, agonists and antagonists of the invention and methods for the use of these compositions. These uses include identifying, diagnosing, monitoring, staging, imaging and treating breast cancer and non-cancerous disease states in breast tissue, identifying breast tissue, monitoring and identifying and/or designing agonists and antagonists of polypeptides of the invention. The uses also include gene therapy, production of transgenic animals and cells, and production of engineered breast tissue for treatment and research.